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09/771,464

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Veijo Vanttinen

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EXAMINER

NGUYEN, HANH N

ART UNIT

PAPER NUMBER

2662

DATE MAILED: 10/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/771,464

Applicant(s)

VANTTINEN ET AL.

Examiner

Hanh Nguyen

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/12/01&6/07/01.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

Claims 2, 14, 15 and 17 are objected to because of the following informalities:

In claim 14, line 3, a semi-column is missing after "the core network".

line 5, the "and" is not necessary.

In claims 2 and 15, the "and/or" on lines 2 and 3 should be rewritten as either "and" or "or".

In claim 17, does this claim means that the subscriber terminal comprises a means for inserting at least part of information into the paging response message received by the core network ?. Applicant needs to rewrite this claim for clearly understanding. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6 and 19 recites the limitation "the functions" in line 2. There is insufficient antecedent basis for this limitation in the claim.

In claims 6 and 19, it is not clearly described what is meant by "the functions" in line 2.

Claims 7-9 and 20-22 are rejected because they depend on claims 6 and 19 respectively.

Claims 10 and 23 recites the limitation "the target set" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claims 11 and 24 are rejected because they depend on claims 10 and 23 respectively.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 14 are rejected under 35 USC 102(e) as being anticipated by Verdonk (Pat. No. 6,330,454 B1).

In claims 1, 2, 3, 5, 14, 15, 16, 18 Verdonk discloses, in Fig.1, a combination of serving node 141, customer server 140 and server control point SCP 142 (a core network) determines a location of mobile unit 128 (subscriber) by transmitting a location request via a packet data network 112 (packet switch system) to MSC 102 (the core network transmitting a location request to the radio network). See col.5, lines 1-7 & lines 20-25 & 32-40. The MSC 102 sends a page to the mobile unit 128 (the radio network transmitting a paging message to the subscriber terminal). See col.5, lines 50-52. The mobile unit 128 responds it location to MSC 102 (subscriber unit transmits a page response to the radio network) which transmits the required

mobile location to the customer server 140 ( the radio network transmits the page response message to the core network). See col.5, lines 50-60. The determination of mobile unit location comprises mobile current location, previous location ( see col.5, lines 5-15 & col.6, lines 1-7), time stamp indicating what time the location was last determined ( timing information, see col.5, lines 45-50), identity of cell 144 serving the mobile unit (identity of serving cell, See col.5, lines 37-42 & col.6, lines 10-15).

In claims 4 and 17, Verdonk discloses that the mobile unit, when responses its location to the MSC, attaches it cell identity which is stored by the MSC (subscriber unit inserts at least part of information into the paging response message). See col.7, lines 30-47.

In claims 10, 11, 23 and 24, Verdonk discloses that in determining the mobile location, the serving MSC determines the most likely location of the mobile unit within the cell/sector wherein the mobile unit could reside anywhere within its current cell/sector (target set corresponds to quality of service when determining location of subscriber terminal). See col.2, lines 60-67. If the cell/sector services a heavily traveled road, the serving MSC determines a mean location on the road and assumes that the mean location is where the mobile unit resides (performing better quality of service if the the target set is not achieved). See col.3, lines 5-10.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 7, 8, 19, 20 and 21 are rejected under 35 USC 103(a) as being unpatentable over Verdonk (Pat. No. 6,330,454 B1) in view of Willars et al. (US pat. No. 6,285,667 B1).

In claims 6, 7, 9, 19, 20 and 22, Verdonk does not disclose the subscriber terminal initiates the functions including measuring the signal and continues the performance of the functions. Willars et al. discloses, in Fig. 1, a mobile station 1, after responding to the page request from a core network, continues to monitor the page channel from the core network via the radio network (see col. 4, lines 1-10 & line 55-60). Therefore, it would have been obvious to one of ordinary skill in the art to modify the Verdonk to continue to receive page requests from the core network as suggested by Willars. The motivation is to help the customer server of Verdonk determine its employee location and enhance the communication more effectively.

In claims 8 and 21, Verdonk discloses the paging signal received by the mobile unit 128 is transmitted from MSC 116 (signal transmitted by other base stations) via the serving MSC 102 (signal of serving cell). See col. 5, lines 20-40.

Claims 12, 13, 25 and 26 are rejected under 35 USC 103(a) as being unpatentable over Verdonk (Pat. No. 6,330,454 B1).

In claims 12, 13, 25 and 26, Verdonk does not disclose the paging message is transmitted even though the subscriber terminal would already be on standby due to the paging message received earlier; and the paging message and the response message use a protocol corresponding to the third layer of the OSI model. The mobile unit of Verdonk is designed to continue to receive a paging message after receiving an earlier message. Therefore, the mobile unit, if it would already be in the sleep mode, should be able to receive a paging message due to a well-known skill in the art. The OSI model has been a well-known skill used to transmit paging messages.

*Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kotola et al. (Pat. 6,321,257 B1) discloses method and Apparatus for Accessing Internet Service in a Mobile Communication Network.

Lupien et al. (Pat. 6,389,008 B1) discloses Integrated radio telecommunication networks and method of Interworking an ANSI-41 Network and GPRS.

Stephens et al. (Pat. 6,600,920 B1) discloses Method and System for Delivering Wireless Calls.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Nguyen whose telephone number is 571 272 3092. The examiner can normally be reached on Monday-Friday from 8AM to 4:30PM. The examiner can also be reached on alternate

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached on 571 272 3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Hanh Nguyen

Hanh Nguyen

October 26, 2004